

Remarks

Claims 1-37 are pending in this application. In an Office Action dated December 17, 2005, the Examiner rejected claims 1, 4, 10, 13, 21, 24, 32 and 35 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,212,261 to Meubus *et al.* (Meubus). The Examiner rejected claims 1-3, 5-8, 14-19 and 27-30 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent No. 5,652,789 to Miner *et al.* (Miner) in view of Meubus. The Examiner rejected claims 9, 11, 12, 20, 22, 23, 31, 33 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Miner in view of Meubus and further in view of U.S. Patent No. 6,064,730 to Ginsberg (Ginsberg). The Examiner rejected claims 25 and 37 under 35 U.S.C. § 103(a) as being unpatentable over Meubus in view of U.S. Patent No. 5,742,675 to Kilander *et al.* (Kilander). The Examiner rejected claims 26 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Meubus in view of Kilander and in further view of U.S. Patent No. 5,982,859 to Meek *et al.* (Meek). Applicants respectfully disagree with the Examiner's rejections and request reconsideration in light of the following remarks:

Claim 1 provides a method of call queuing notification implemented in a telecommunications advanced intelligent network. The method includes receiving a call to access a subscriber line and determining that the subscriber line is busy. The call is then placed in a queue, implemented within the telecommunications network, associated with the subscriber line. A separate call is placed to the subscriber indicating status of the queued subscriber line access call.

The Examiner asserts that claim 1 is anticipated by Meubus. Meubus does not disclose Applicants' invention for at least two reasons: Meubus does not disclose queuing calls and Meubus does not disclose placing a separate call to the subscriber indicating the status of a first call.

Claim 1 provides for placing a call in a queue when a subscriber line is busy. The Examiner asserts that this is disclosed in Meubus at col. 2, lines 1-3, which is included in the following paragraph at col. 1, ln. 61, et seq., reproduced as follows (emphasis added):

According to a further aspect of the present invention there is provided a method of disposing of an incoming call intended for a called station coupled to a telecommunications network, the called station having a data processing terminal

engaged in a data call with a data communications network, the data call being through a connection in the telecommunications network to an access gateway for the data network, the method comprising the steps of **holding call processing of the incoming call at a switching system** in the telecommunications network, providing a signal advising of the incoming call from the access gateway, over the data call connection through the telecommunications network, to the data processing terminal, receiving from the data processing terminal, via the access gateway, instructions for disposing of the incoming call and continuing the call processing of the incoming call at the switching system according to the received instructions.

Holding a single call at a switch does not teach queuing the call. A queue is a sequence of slots into which waiting calls are placed until it is each call's turn (usually first in, first out) to be processed.

Queue A stream of tasks waiting to be executed. A series of calls or messages waiting for connection to a line.¹

Queuing The act of "stacking" or holding calls to be handled by a specific person, trunk or trunk group.²

These definitions are consistent with the way "queue" and "queuing" are used by Applicants. For example, Figure 2 illustrates an Intelligent Peripheral (42) having a queue with multiple slots (43). (*See*, pg. 7, ln. 28 *et seq.*)

None of the terms "queue," "queued," "queuing" or any synonymous term appears in Meubus. Meubus simply does not teach or fairly suggest Applicants' queuing.

Claim 1 also provides for "placing a separate call to the subscriber indicating status of the queued subscriber line access call." The Examiner asserts that Applicants' "separate call" is disclosed in Meubus at col. 2, ll 31-32, which is included in the paragraph beginning at col. 2, ln. 27, reproduced as follows (emphasis added):

¹Newton's Telecom Dictionary, 15th Ed., 1999, pg. 642.

²*Id.*

According to a still further aspect of the present invention there is provided a method of managing telephone service to a called station coupled to a telecommunications network while the called station is engaged in a data call, the method comprising the steps of providing a message indicative of an incoming call to the called station **via the data call**, accepting a message from the called station via the data call and disposing of the incoming call in response to the accepted message.

The call referred to by the Examiner is an existing "data call," which prohibited the incoming call from reaching the subscriber in the first place. This, therefore, cannot be Applicants' "separate call" placed to indicate the status of the queued subscriber line access call.

Meubus does not disclose or fairly suggest Applicants' invention of claim 1. Claims 2-12 depend from claim 1 and are therefore also patentable over Meubus.

The Examiner also rejected claim 1 as an obvious combination of Meubus and Miner. The Examiner cites Miner at col. 3, ll. 13-15 for placing a separate phone call. These passages are included in the paragraph at col. 3, ln. 3, *et seq.*, reproduced as follows (emphasis added):

In general, in yet another aspect, the invention is a method implemented by a computer-based electronic assistant to receive and manage incoming calls to a subscriber. The method includes the steps of: **receiving an incoming call to the subscriber from a caller**; in response to receiving the incoming call, establishing a first connection between the electronic assistant and the caller; through a dialog between the electronic assistant and the caller over the first connection, determining the identity of the caller; detecting that the subscriber is presently interacting with the electronic assistant through a second separate connection; electronically alerting the subscriber over the second connection that there is an incoming call for the subscriber; electronically identifying to the subscriber the identity of the caller; monitoring the second connection for a response sent by the subscriber to the electronic assistant directing the electronic assistant how to process the incoming call.

There is no indication that Miner's "assistant" places a separate call to the subscriber indicating status of a queued call when the subscriber's line is busy. The first step of Miner's method is "receiving an incoming call to the subscriber from a caller." Miner's system works

because the caller reaches the precise number the caller dialed — which happened to be answered by Miner's "assistant." Miner's assistant is nothing more than a fancy CPE device. Miner's assistant may then try to find the subscriber through the "second connection."

In addition, Miner teaches interrupting this "second connection" to provide status information, not placing a separate call as provided by Applicants' claim 1:

As a first step in locating the subscriber, the system determines whether the subscriber is already connected to the system, either through another call or through some other communications medium (e.g. logged into his computer). **If the subscriber is on another call being handled by the system, the system briefly interrupts that call to notify the subscriber that he has a call waiting and it identifies the name of the caller.** If the caller is also logged onto the system through his computer, the system may also send a visual message to the workstation notifying the subscriber of the call and identifying the caller.

Col. 8, ll. 25-35 (emphasis added).

Thus, Miner teaches away from placing a separate call by interrupting the subscriber in his present call.

As described above, Meubus does not fill in the missing teachings of Miner. Moreover, there is no reason to believe that Miner's invention will work if inserted as an element of an AIN. Claim 1 is patentable over any combination of Miner and Meubus. Claims 2-12, which depend from claim 1, are therefore also patentable.

Independent claim 13 provides a system for call queue notification implemented in an Advanced Intelligent Network (AIN) having at least one central office switch and a service control point in electrical communication with subscriber switches via a signaling network. The system includes an intelligent peripheral in electrical communication with the central office switch and the service control point, The intelligent peripheral is equipped with queuing functionality for each subscriber. The intelligent peripheral places a first call to the central office switch for receipt by a subscriber having a call placed in queue, the call placed in response to a determination that a line associated with the subscriber is idle. The intelligent peripheral further places a second call providing status information to the subscriber about at least one queued call.

The Examiner rejected claim 13 "for the same reasons as discussed above with respect to claim 1. Without agreeing that the scope of claim 13 is commensurate with that of claim 1, Applicants believe the arguments for patentability of claim 1 apply to claim 13.

The Examiner asserts that Meubus' Gateway Agent (GA 19) is Applicants' Intelligent Peripheral. However, the Examiner points to no disclosure teaching or suggesting the "first call" provided in claim 13. The Examiner's only support that Meubus' GA places the "second call" of claim 13 is to cite col 6, ll. 42-47, reproduced as follows:

In this implementation of the invention, the GA [19] is implemented using the AIN call model on SSP [2]. The PSTN-G [4] component could be implemented in many ways, including but not limited to an Advanced Intelligent Network (AIN) Service Control Point (SCP). The PSTN signalling capabilities used are the Signalling System #7 (SS7) Transaction Capability Application Part (TCAP) as interfaces [11], [12] and [20].

This paragraph appears to be unrelated to Applicants' second call.

The Examiner has failed to establish a *prima facie* case that Meubus anticipates claim 13. Claims 14-23, which depend from claim 13, are therefore also patentable.

Independent claim 24 provides a method for notifying a subscriber of queued call status, the call placed from a caller to a subscriber line, the call processed by an Advanced Intelligent Network (AIN) having at least one central office switch and a service control point (SCP) in electrical communication with a plurality of subscriber switches via a signaling network. The method includes providing an intelligent peripheral with queuing functionality in electrical communication with the at least one central office switch and the SCP. A first call is received to access a subscriber line. A determination is made that the subscriber line is busy. The first call is queued in the intelligent peripheral. A second call is placed from the intelligent peripheral to the subscriber indicating status of the queued first call.

The Examiner rejected claim 24 using the same reasoning as used to reject claim 13. Without agreeing claim 13 and 24 have the same scope, Applicants believe that the same arguments applied to claim 13 show claim 24 to be patentable over Meubus. Moreover, the paragraph cited by the Examiner and reproduced above does not teach or suggest queuing a first call in Meubus' GA 19.

Claim 24 is patentable over Meubus. Claims 25-34, which depend from claim 24, are therefore also patentable.

Independent claim 35 provides a method of notification about queuing of a telephone call from a caller to a subscriber telephone line. The method includes providing an intelligent peripheral with queuing functionality in electrical communication with the central office switch and the SCP. Signaling is monitored to detect a TAT trigger. A first electrical signal is generated for receipt by the SCP in response to the detected TAT trigger. A second electrical signal is generated at the SCP for receipt by the intelligent peripheral requesting status of a queue associated with the subscriber line. A third electrical signal is generated at the SCP for receipt by the subscriber switch instructing the subscriber switch to forward the call to the intelligent peripheral to be added to the queue in response to a determination that the queue is active. A call is placed from the intelligent peripheral to a subscriber subscribing to the subscriber telephone line indicating status of the queued call.

The Examiner rejected claim 35 "for the same reason as discussed above with respect to claim 24." Without admitting that claims 24 and 35 have the same scope, Applicants believe the arguments for claim 24 indicate claim 35 is patentable as well.

The Examiner's additional arguments seem to assert that Meubus' PSTN-G 4 implements Applicants' SCP. However, there is no teaching or suggestion in Meubus that PSTN-G 4 sends a signal to GA 19 requesting queue status or that PSTN-G 4 sends the subscriber switch a signal instructing the switch to forward any call to the GA 19 or that GA 19 places a call to the subscriber indicating status. If the Examiner believes otherwise, the Examiner is respectfully requested to specifically refer to the very detailed set of messages and devices illustrated in Meubus' Figures 2-8.

Claim 35 is patentable over Meubus. Claims 36 and 37, which depend from claim 35, are therefore also patentable.

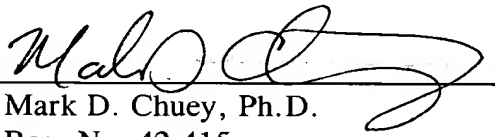
The Examiner also rejected claims 1, 24 and 35 under 35 U.S.C. § 112, second paragraph, stating that "It is unclear as to whom a second call providing status information is sent." Applicants disagree that the claims require a receiver for the second call in order to particularly point out and distinctly claim the invention. However, in an effort to move this

case to issuance, Applicants have indicated that it is the subscriber who receives status information.

Claims 1-37, as amended, are pending in this application. Applicants believe these claims meet all substantive requirements for patentability and respectfully request that this case be passed to issuance. No fee is believed due by filing this paper. However, any fee due may be withdrawn from Deposit Account No. 21-0456 as specified in the Application Transmittal.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,
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